

REMARKS

The Pending Claims

Claims 56, 61-63, 72, and 76 have been amended, and claims 9-12, 15, 23, 24, 28, 29, 31, 38, 40, 43, 44, 47, 48, 50-52, 59, 60, 73, and 74 have been canceled. Thus, claims 53-58, 61-72, and 75-98 currently are pending in the application, with claims 53-55, 71, 85, and 98 being withdrawn from consideration.

Summary of the Office Action

The Office Action rejects claims 56-58, 64-70, 72-74, 78-84, and 86-88 under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 5,286,540 (Suga et al.) (hereinafter “the Suga ‘540 patent”) in view of U.S. Patent No. 4,357,288 (Oas et al.) (hereinafter “the Oas ‘288 patent”).

The Office Action rejects claims 62 and 76 under 35 U.S.C. § 103(a) as allegedly unpatentable over the Suga ‘540 patent in view of the Oas ‘288 patent and U.S. Patent No. 5,049,605 (Rekers) (hereinafter “the Rekers ‘605 patent”).

The Office Action rejects claims 61, 63, 75, 77, and 89-97 under 35 U.S.C. § 103(a) as allegedly unpatentable over the Suga ‘540 patent in view of the Oas ‘288 patent and U.S. Patent Application Publication No. US 2004/0063830 A1 (Schmidt et al.) (hereinafter “the Schmidt ‘830 publication”).

The Office Action also rejects claims 56-60, 64-70, 72-74, 78-84, and 86-88 under 35 U.S.C. § 103(a) as allegedly unpatentable over the Oas ‘288 patent in view of the Suga ‘540 patent.

The Office Action also rejects claims 62 and 76 under 35 U.S.C. § 103(a) as allegedly unpatentable over the Oas ‘288 patent in view of the Suga ‘540 patent and the Rekers ‘605 patent.

The Office Action also rejects claims 61, 63, 75, 77, and 89-97 under 35 U.S.C. § 103(a) as allegedly unpatentable over the Oas ‘288 patent in view of the Suga ‘540 patent and the Schmidt ‘830 publication.

Discussion of the Section 103 Rejections

The Office Action rejects the pending claims as allegedly obvious over the combination of the Suga ‘540 patent and the Oas ‘288 patent alone or in further view of the Rekers ‘605 patent or the Schmidt ‘830 publication. Applicants respectfully submit that the invention defined by the pending claims cannot properly be

considered *prima facie* obvious over the cited references because the combinations proposed in the Office Action teach away from the invention defined by the pending claims.

As amended, the pending claims recite a process in which a polymer composition comprising polypropylene and a dibenzylidene sorbitol nucleating agent is formed into a container using a two-stage injection stretch blow molding (ISBM) process. While the Suga '540 patent does generally disclose the use of "di(alkylbenzilidene)sorbitol" in polypropylene ISBM, Applicants note that the Suga '540 patent specifically teaches that the use of "di(alkylbenzilidene)sorbitol" in ISBM is undesirable (see, e.g., the Suga '540 patent at col. 1, lines 35-42). For example, the Suga '540 patent teaches that the "di(alkylbenzilidene)sorbitol" emits odors during the molding process, produces molded products that emit odors, and, if the product is fashioned into a container, leaches into the contents of the container (see, e.g., the Suga '540 patent at col. 1, lines 35-42). Furthermore, several of the comparative examples of the Suga '540 patent demonstrate the alleged odor and leaching problems exhibited by products made by ISBM using a "di(alkylbenzilidene)sorbitol" nucleating agent (see, e.g., Comparative Examples 4-6 and 11-13 of the Suga '540 patent).

Moreover, the principal objective of the Suga '540 patent is to provide a polypropylene ISBM process that yields products having acceptable transparency and strength, but does not exhibit the odor and leaching problems associated with the use of "di(alkylbenzilidene)sorbitol" (see, e.g., the Suga '540 patent at col. 1, lines 9-11 and lines 43-59). To that end, the Suga '540 patent concentrates on the use of particular 3-methylbutene-1 polymers as nucleating agents to be used in polypropylene ISBM in place of "di(alkylbenzilidene)sorbitol" (see, e.g., the Suga '540 patent at col. 1, lines 43-59). The examples and comparative examples of the Suga '540 patent go on to demonstrate the alleged superiority of such nucleating agents over "di(alkylbenzilidene)sorbitol" nucleating agents in polypropylene ISBM.

Thus, Applicants respectfully submit that one of ordinary skill in the art, having read the Suga '540 patent, would not have been motivated to develop a polypropylene ISBM process using a dibenzylidene sorbitol nucleating agent, such as the process recited in the pending claims. Indeed, Applicants submit that one of ordinary skill in the art would have understood the Suga '540 patent's teachings regarding the alleged problems associated with the use of

“di(alkylbenzylidene)sorbitol” to teach away from polypropylene ISBM processes using such nucleating agents. Accordingly, one of ordinary skill in the art, at the time of invention, would not have been motivated to modify and/or combine the cited references in such a way as to arrive at a polypropylene ISBM process such as that recited in the pending claims.

Applicants further submit that neither the Oas ‘288 patent, the Rekens ‘605 patent, nor the Schmidt ‘830 publication provide any teaching that would mitigate the Suga ‘540 patent’s strong teaching away from the use of dibenzylidene sorbitols in polypropylene ISBM. For example, as acknowledge by the Office Action, the Oas ‘288 patent is silent regarding the use of nucleating agents in polypropylene ISBM. While the Schmidt ‘830 publication does disclose the use of certain dibenzylidene sorbitols in polypropylene compositions and that such compositions may be processed using various molding processes, the Schmidt ‘830 publication does not appear to specifically teach or suggest that the use of such compositions in ISBM will be free of the problems taught by the Suga ‘540 patent. Applicants note that the Rekens’ 605 patent appears to be similarly silent regarding polypropylene ISBM.

In view of the foregoing, Applicants respectfully submit that the subject matter defined by the pending claims cannot properly be considered *prima facie* obvious over the references cited in the Office Action. In particular, Applicants submit that the combinations proposed in the Office Action actually teach away from the claimed subject matter because the Suga ‘540 patent, which is relied upon in each of the obviousness rejections, specifically teaches away from ISBM processes utilizing polypropylene compositions containing dibenzylidene sorbitols nucleating agents, such as those recited in the pending claims. Accordingly, Applicants respectfully submit that the Section 103 rejections of the pending claims are improper and should be withdrawn.

In re Application of Batlaw et al.
Application No. 10/764,234

Conclusion

In view of the foregoing, the application is considered in proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone interview would expedite prosecution of the instant application, the Examiner is invited to call the undersigned.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. M. Lanning', is written over a horizontal line.

Robert M. Lanning
Reg. No. 57,121
MILLIKEN & COMPANY, M-495
P.O. Box 1926
Spartanburg, SC 29304
Telephone: (864) 503-1537
Facsimile: (864) 503-1999

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